

### ABSTRACT OF THE DISCLOSURE

A variable optical attenuator. A PIN structure is integrated with an optical detector such as a PIN diode or an APD diode. When the PIN structure is forward biased, the light signal is not affected and is detected by the optical detector. When the PIN structure is reverse biased, the light signal is attenuated and the dynamic range of the optical detector can be increased.

W:\15436\269.1\NDFW0000008125V001.doc

WORKMAN NYDEGGER  
A PROFESSIONAL CORPORATION  
ATTORNEYS AT LAW  
1000 EAGLE GATE TOWER  
60 EAST SOUTH TEMPLE  
SALT LAKE CITY, UTAH 84111